	L #	Hits	Search Text	DBs
1	L1	0	interphase? and chromosome? adj5 break?	USPAT
2	L2	0	interphase? and (chromosome? adj5 break?)	USPAT
3	L3	12	chromosome? adj5 break?	USPAT

(FILE 'HOME' ENTERED AT 09:26:34 ON 09 NOV 2000)

FILE 'MEDLINE' ENTERED AT 09:26:41 ON 09 NOV 2000

```
L1        199463 S CHROMOSOME?
L2        661077 S BREAK? OR DAMAG? OR PIECE? OR MARK?
L3         40667 S L1 AND L2
L4           227 S L3 AND CAFFEINE
L5           205 S L4 AND (BREAK? OR DAMAG?)
L6            15 S L5 AND (ALZHEIMER? OR DISEASE)
L7         19942 S L3 AND (VIVO OR CELL)
L8             7 S L7 AND DNTP
L9          2501 S L7 AND (DNTP OR FLUORESCEN?)
L10            0 S L8 AND (ALZHEIMER? OR DISEASE?)
L11         2069 S L3 AND (FLUORESCEN? OR LABEL? OR DNTP? OR DUTP?) (P) (VIVO
OR
L12          788 S L3 AND (FLUORESCEN? OR LABEL? OR DNTP? OR DUTP?) (10A)
(VIVO
L13          109 S L12 AND (ALZHEIMER? OR DISEASE?)
L14            0 S L13 AND CAFFEINE
L15        10083 S L3 AND (BREAK?)
L16         1872 S CHROMOSOME BREAK?
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FILE 'STNGUIDE' ENTERED AT 10:05:10 ON 09 NOV 2000

L1 ANSWER 29 OF 38 MEDLINE
ACCESSION NUMBER: 93061079 MEDLINE
DOCUMENT NUMBER: 93061079
TITLE: Chromosome aberrations of human small cell lung cancer induced by a new 111In-bleomycin complex.
AUTHOR: Hou D Y; Maruyama Y; Drago J R
CORPORATE SOURCE: Department of Radiation Medicine, University of Kentucky Medical Center, Lexington.
CONTRACT NUMBER: RR05374 (NCRR)
SOURCE: JOURNAL OF SURGICAL ONCOLOGY, (1992 Dec) 51 (4) 236-42. Journal code: K79. ISSN: 0022-4790.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 199302
AB A new 111Indium **labeled** bleomycin complex (111In-BLMC) was prepared and found to be effective for tumor imaging and therapy both in mouse glioma and human small **cell** lung cancer (SCLC) **cells**. Chromosome aberrations were studied in human SCLC **cells** to explore its mechanisms of killing cancer **cells**. SCLC **cells** (N417) were exposed to 111In-BLMC, BLM, or 111InCl3 (for control) for 1 hour, treated with colcemid, and chromosomal changes were analyzed. A dramatic increase in chromatic gaps, breaks, **chromosome breaks**, double minutes, rings, triradii, quadriradii, and chromosome stickiness were observed in the **cells** treated by 111In-BLMC compared to BLM or 111InCl3. These results indicated that 111In-BLMC has therapeutic potential for combination chemo-radiotherapy of cancer (e.g., by Auger electrons and local energy deposition).

L1 ANSWER 21 OF 38 MEDLINE
ACCESSION NUMBER: 97148810 MEDLINE
DOCUMENT NUMBER: 97148810
TITLE: Cellular and subcellular studies of the radiation effects of Auger electron-emitting estrogens.
AUTHOR: DeSombre E R; Hughes A; Landel C C; Greene G; Hanson R; Schwartz J L
CORPORATE SOURCE: Ben May Institute, University of Chicago, IL 60637, USA.. gdesombr@ben-may.bsd.uchicago.edu
CONTRACT NUMBER: CA 14599 (NCI)
SOURCE: ACTA ONCOLOGICA, (1996) 35 (7) 833-40. Journal code: AON. ISSN: 0284-186X.
PUB. COUNTRY: Norway
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 199704
ENTRY WEEK: 19970401
AB We studied the effect of 123I-**labeled** estrogen (123I-E) in estrogen receptor (ER)-rich **cells** in culture and in **cell** free model systems in **vitro** to elucidate the nature of the radiotoxicity for ER + **cells** of estrogens containing nuclides which emit Auger electrons. In **cells** the 123I-E caused a dose-dependent, unlabeled estrogen-inhibitable induction of chromosome aberrations. A dose of about 1000 decays per **cell**, which is

approximately the mean lethal dose for these **cells**, resulted in an average of 1 **chromosome break** per **cell**. This supports the hypothesis that the lethal lesion induced by 123I-E is a **chromosome break**. Incubation of 123I-E/ER complex, but not 123I-E alone, with 27-mer duplex estrogen response element (ERE) DNA produced a dose-dependent cleavage of the ERE. However, we were unable to detect any fragmentation of either the 66 kDa full length ER in **cell** extracts or a purified 31 kDa hormone binding domain when incubated with excess 123I-E. Thus it appears that 123I-E effects its radiotoxicity by binding to ER, associating with ERE DNA and, by directing high LET radiation to DNA, inducing lethal **chromosome breaks**.

L1 ANSWER 13 OF 38 MEDLINE
ACCESSION NUMBER: 1998305731 MEDLINE
DOCUMENT NUMBER: 98305731
TITLE: Induction of apoptosis by bleomycin in resting and cycling human lymphocytes.
AUTHOR: Vernole P; Tedeschi B; Caporossi D; Maccarrone M; Melino G;
Annicchiarico-Petruzzelli M
CORPORATE SOURCE: Dipartimento di Sanit`a Pubblica e Biologia Cellulare, Universit`a di Tor Vergata, Roma, Italy.
SOURCE: MUTAGENESIS, (1998 May) 13 (3) 209-15.
Journal code: MUG. ISSN: 0267-8357.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199906
ENTRY WEEK: 19990603
AB Bleomycin induces DNA and **chromosome breakage**. The differential sensitivity to the drug has been used in **vitro** to identify individuals at high risk of developing tumours. However, there are limited reports on the ability of bleomycin to induce apoptosis. In this study we tested induction of apoptosis in human peripheral lymphocytes by bleomycin at different concentrations and different culture times using various parameters, such as nuclear fragmentation and DNA fragmentation, evaluated either in situ with terminal transferase and **labelled** nucleotides (TUNEL) or by flow cytometry analysis. We demonstrate that bleomycin induces apoptosis without previous permeabilization of the **cell** membrane. **Cell** death occurs mainly by apoptosis and not by necrosis, with significant alteration of membrane lipoperoxidation (evaluated by luminescence).

L1 ANSWER 11 OF 38 MEDLINE
ACCESSION NUMBER: 1998377119 MEDLINE
DOCUMENT NUMBER: 98377119
TITLE: Influence of serum micronutrients on the incidence of kinetochore-positive or -negative micronuclei in human peripheral blood lymphocytes.
AUTHOR: Odagiri Y; Uchida H
CORPORATE SOURCE: Division of Human and Health Sciences, Yamanashi Prefectural College of Nursing, Japan..
byi04452@niftyserve.or.jp
SOURCE: MUTATION RESEARCH, (1998 Jul 8) 415 (1-2) 35-45.
Journal code: NNA. ISSN: 0027-5107.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 199811

ENTRY WEEK: 19981103

AB The possible contribution of some selected serum micronutrients (beta-carotene, vitamins B12 and C, folic acid and alpha-tocopherol) to spontaneous chromosomal damage was investigated in human peripheral blood lymphocytes from 33 non-smoking healthy donors by the cytokinesis-block micronucleus assay. **Labelling** of micronuclei with antikinetochore serum was used to discriminate between kinetochore-positive and -negative micronuclei and thus between micronuclei which arise from whole chromosome loss and those which arise from **chromosome breaks**. Simple correlation analysis showed that age was significantly associated with the increased frequency of micronucleated **cells**, and this age-related increase in these **cells** was due to the increase in **cells** with both kinetochore-positive and -negative micronuclei. Serum micronutrient levels had no apparent significant effects on incidence of micronucleated **cells** except for the weak positive correlation between vitamin B12 levels and frequency of kinetochore-positive micronucleated **cells**. Multiple regression analysis with age and serum micronutrient levels as independent variables showed that (a) age was the most influential variable for the frequency of micronucleated **cells**, (b) the serum vitamin C level was associated with increased frequency of spontaneous micronucleated **cells**, and this increase was mainly due to the increase in **cells** with kinetochore-positive micronuclei, and (c) the serum folic acid level was significantly and negatively related to the frequencies of **cells** with both kinetochore-positive and -negative micronuclei. To avoid the predominant age-effect, we also performed separate multiple regression analysis with age-adjusted frequency of micronucleated **cells** as dependent variable. The results from this analysis again showed a significant and positive effect of serum vitamin C level on age-adjusted frequency of kinetochore-positive micronucleated **cells**, while marginal negative effect of folic acid on age-adjusted frequency of total micronucleated **cells** ($P < 0.06$) and kinetochore-positive micronucleated **cells** ($P < 0.051$) was detected. These results suggest that age and serum vitamin C are definitely variables for frequencies of spontaneous chromosome loss, and that serum folic acid is perhaps another important micronutrient which influence the frequency of spontaneous chromosomal damage.

(FILE 'HOME' ENTERED AT 15:05:07 ON 17 MAY 2000)

FILE 'MEDLINE' ENTERED AT 15:05:11 ON 17 MAY 2000

L1 27222 S ALZHEIMER?

L2 193974 S CHROMOSOME?

L3 97190 S (PHYTOHEMAGGLUTIN OR POKEWEED OR MITOGEN OR UV OR NITROQUINOL

L4 7 S L1 AND L2 AND L3

L5 2416 S CHROMOSOME? (7A) (INSTABIL? OR FRAGI? OR HYPERSENSITIV? OR RA

L6 7 S L5 AND L1

FILE 'CAPLUS' ENTERED AT 15:11:56 ON 17 MAY 2000

L7 6 S L6

FILE 'MEDLINE' ENTERED AT 15:14:05 ON 17 MAY 2000

L8 35 S L5 AND L3

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, SCISEARCH' ENTERED AT 14:02:51 ON 26 APR 2000

		E	STONE J/AU
L1	1503	S	E3
L2	209	S	E13
		E	STONE JOHN/AU
L3	17	S	E3
L4	21	S	E15
L5	1750	S	L1 OR L2 OR L3 OR L4
L6	535	S	L5 AND (CHROMOSOME OR CELL? OR REPAIR RETARDING AGENT)
L7	1	S	L6 AND (MITOGEN)
L8	146437	S	MITOGEN
L9	10421653	S	CELL? OR IN SITU OR INSITU
L10	706476	S	CHROMOSOME?
L11	1834	S	L8 AND L9 AND L10
L12	0	S	L11 AND (FIX AND REPAR (3A) RETARD? (3A) AGENT?)
L13	374	S	L11 AND (MARK? OR LABEL? OR FLUORSECEN?)
L14	1	S	L13 AND ALZHEIMER?

STIC-ILL

Adonis

From: Goldberg, Jeanine
Sent: Tuesday, November 14, 2000 8:08 AM
To: STIC-ILL
Subject: please pull- chromosome

1. MUTATION RESEARCH, (1999 Sep 30) 445 (2) 155-66.
Journal code: NNA. ISSN: 0027-5107.

2. INTERNATIONAL JOURNAL OF RADIATION BIOLOGY, (1994 Aug) 66 (2) 133-42.

3. INTERNATIONAL JOURNAL OF RADIATION BIOLOGY, (1994 Aug) 66 (2) 133-42.

4. INTERNATIONAL JOURNAL OF RADIATION BIOLOGY, (1993 May) 63 (5) 617-22.

5. MUTATION RESEARCH, (1996 Jun 12) 353 (1-2) 11-46. Ref: 90
Journal code: NNA. ISSN: 0027-5107.

THANK YOU

Jeanine Enewold Goldberg
1655
CM1--12D11
306-5817

STIC-ILL adams #2

From: Goldberg, Jeanine
Sent: Tuesday, November 14, 2000 8:08 AM
To: STIC-ILL
Subject: please pull- chromosome

1. MUTATION RESEARCH, (1999 Sep 30) 445 (2) 155-66.
Journal code: NNA. ISSN: 0027-5107.

2. INTERNATIONAL JOURNAL OF RADIATION BIOLOGY, (1994 Aug) 66
(2) 133-42.

3. INTERNATIONAL JOURNAL OF RADIATION BIOLOGY, (1994 Aug) 66
(2) 133-42. Dupe of #2

4. INTERNATIONAL JOURNAL OF RADIATION BIOLOGY, (1993 May) 63
(5) 617-22.

5. MUTATION RESEARCH, (1996 Jun 12) 353 (1-2) 11-46. Ref: 90
Journal code: NNA. ISSN: 0027-5107.

THANK YOU

Jeanine Enewold Goldberg
1655
CM1--12D11
306-5817

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Sent: Tuesday, November 14, 2000 8:08 AM
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1. MUTATION RESEARCH, (1999 Sep 30) 445 (2) 155-66.
Journal code: NNA. ISSN: 0027-5107.

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5. MUTATION RESEARCH, (1996 Jun 12) 353 (1-2) 11-46. Ref: 90
Journal code: NNA. ISSN: 0027-5107.

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1. MUTATION RESEARCH, (1999 Sep 30) 445 (2) 155-66.
Journal code: NNA. ISSN: 0027-5107.

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4. INTERNATIONAL JOURNAL OF RADIATION BIOLOGY, (1993 May) 63 (5) 617-22.

5. MUTATION RESEARCH, (1996 Jun 12) 353 (1-2) 11-46. Ref: 90
Journal code: NNA. ISSN: 0027-5107.

THANK YOU

Jeanine Enewold Goldberg
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306-5817

321666

STIC-ILL

From: Goldberg, Jeanine
Sent: Tuesday, November 28, 2000 12:51 PM
To: STIC-ILL
Subject: please pull chromosome references

1388954

1. Mutagenesis, Vol 12, pg 449-455, 1997.

THANK YOU

Jeanine Enewold Goldberg
1655
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306-5817

0267-8357

DL-ND

WAU 11/30

11/28